

We claim:

1. A process for the preparation of EPCRS form of 3-[2-[4-(6-Fluoro-1, 2-benzisoxazol-3-yl)-1-piperidinyl] ethyl]-6,7,8,9-tetrahydro-2-methyl-4H-pyrido [1,2-a] pyrimidin-4-one (Risperidone), which comprises:
 - a) dissolving the Risperidone in an organic solvent(s) such as methyl propyl ketone, anisole, dioxane, methyl cellosolve, xylene, 1- pentanol, mixture of alcohols such as methanol or ethanol with solvents as acetone, methyl isobutyl ketone, methyl cellosolve, heptane, di-isopropyl ether, cyclohexane, isooctane, anisole, mixture of toluene with solvents such as acetone, iso octane, heptane, diisopropyl ether, mixture of xylene with solvents such as n-hexane, heptane, isooctane, t-butyl ether, mixture of methyl isobutyl ketone and methyl cellosolve, mixture of dichloromethane and iso octane, Mixture of methanol and water, Aqueous ethanol, mixture of chloroform and cyclohexane etc or a combination of above described solvents at hot condition or at reflux
 - b) optionally treating the dissolved solution with carbon
 - c) filtering the reaction solution to get particle free solution
 - d) cooling the reaction solution to get precipitation / optionally adding the anti solvents such as n-hexane, n-heptane, isooctane, cyclohexane etc. for the separation of Risperidone from reaction solution.
 - e) isolating the desired EPCRS form of Risperidone by conventional methods.
2. The process as claimed in claim 1 of step (a), dissolving the Risperidone in an organic solvent selected from methyl propyl ketone, anisole, dioxane, methyl cellosolve, methyl cellosolve, xylene and 1- pentanol .
3. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of alcohols such as methanol or ethanol with solvents like

acetone, methyl isobutyl ketone, methyl cellosolve, n-heptane, di-isopropyl ether, cyclohexane, isooctane and anisole.

4. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of toluene or Xylene with solvents such as acetone, heptane, diisopropyl ether, n-hexane, , isooctane and t-butyl ether.
5. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of methyl isobutyl ketone and methyl cellosolve
6. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of dichloromethane and isooctane
7. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of methanol and water.
8. The process as claimed in claim 1 of step (a), dissolving the Risperidone in Aqueous ethanol.
9. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a mixture of chloroform and cyclohexane.
10. The process as claimed in claim 1 of step (a), dissolving the Risperidone in an Aqueous ethanol ranging 1% to 30%(water content in ethanol).
11. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent or solvents at hot condition ranging from 40⁰C to reflux temperature.
12. The process as claimed in claim 1 of step (a), where in dissolving the Risperidone in a solvent or solvents mixture selected from any of the mentioned solvents in step(a) of claim 1.
13. The crystalline EPCRS form of Risperidone obtained in the process of claim 1 has X-ray powder diffraction pattern with peaks at 7.14 ± 0.2 , 10.79± 0.2 , 11.58 ± 0.2 , 13.84 ± 0.2, 14.35 ± 0.2, 14.96 ± 0.2, 15.62± 0.2 , 16.57± 0.2, 18.63 ± 0.2,

19.07 ± 0.2 , 19.93 ± 0.2 , 21.43 ± 0.2 , 22.32 ± 0.2 , 22.61 ± 0.2 , 23.31 ± 0.2 , 23.62 ± 0.2 , 24.50 ± 0.2 , 25.43 ± 0.2 , 27.67 ± 0.2 , 28.53 ± 0.2 , 29.16 ± 0.2 , 32.57 ± 0.2 ,
 33.15 ± 0.2 and 38.72 ± 0.2 degrees two theta.